

The seven hundred and forty-fifth Meeting of the Club was held in the Senior Common Room, South Side, Imperial College, London, S.W.7 on Tuesday, 18 January 1983 at 7 p.m. The attendance was 20 Members and 8 guests.

Members present were: B. GRAY (*Chairman*). Captain Sir THOMAS BARLOW, R.N., P. J. BELMAN, K. F. BETTON, Dr G. BEVEN, Mrs DIANA BRADLEY, P. J. CONDER, R. A. N. CROUCHER, J. H. ELGOOD, D. J. FISHER, A. GIBBS, R. H. KETTLE, J. KING, Dr A. G. KNOX, Revd. G. K. McCULLOCH, D. G. MEDWAY, Dr J. F. MONK, R. E. F. PEAL, P. S. REDMAN and S. A. H. STATHAM.

Guests present were: Mrs B. M. GIBBS, P. J. HAYMAN, Miss PATRICIA C. MEDWAY, Dr AMICIA MELLAND, Mrs DIANA C. MONK, Mr and Mrs G. H. SEARLE and ROBIN W. WOODS.

Mr Robin W. Woods gave a much appreciated address on "Some Birds of the Falkland Islands", mentioning a number of species with which he had been particularly familiar and especially his ringing studies of Dolphin Gulls *Leucophaeus scoresbii*.

The seven hundred and forty-sixth Meeting of the Club was held in the Senior Common Room, South Side, Imperial College, London, S.W.7 on Tuesday 8 March 1983 at 7 p.m. The attendance was 19 Members and 3 guests.

Members present were: D. R. CALDER (*Chairman*), Major N. A. G. H. BEAL, P. J. BELMAN, K. F. BETTON, Mrs DIANA BRADLEY, P. J. CONDER, R. A. N. CROUCHER, J. H. ELGOOD, D. J. FISHER, B. GRAY, D. GRIFFIN, P. HOGG, Dr A. G. KNOX, Revd. G. K. McCULLOCH, Dr J. F. MONK, R. E. F. PEAL, P. S. REDMAN, C. E. WHEELER and Lieut.-Col. T. C. WHITE.

Guests present were: Dr C. J. CADBURY, Mrs I. McCULLOCH and N. PICOZZI.

Dr C. J. Cadbury gave a stimulating address on "The Restoration of Habitats for Birds" He dealt especially on the need to make the best use possible on land that is available and on what can be achieved in this respect.

Bullfinches *Pyrrhula pyrrhula* and fruit crops

The following is a resumé of the talk given to the Club by T. J. SELLER on 22 June 1982:

Bullfinches *Pyrrhula pyrrhula* are notorious pests of a wide range of fruit and soft fruit crops grown commercially, as well as of ornamental shrubs and fruit bushes in domestic gardens. They attack fruit buds between late November and April, and can decimate or destroy the potential crop. The timing and extent of damage varies markedly between years and some varieties of fruit seem to be more susceptible than others. Pear and apple trees have some degree of tolerance, but plum, gooseberry, black and redcurrant bushes have little and the effects of the damage accumulate. The cost of Bullfinch damage is difficult to estimate, but countrywide it could be in excess of a million pounds.

We have been studying a 2 hectare pear orchard in Kent over a number of years, to analyse the course and extent of Bullfinch damage. During the winter of 1978, Bullfinches began taking pear buds in late December and the damage increased rapidly until by April no tree had escaped. Many of the trees had few, if any buds left and the crop picked the following autumn was small. Estimates indicated that in excess of 860,000 buds had been eaten, representing some 92% of those on the trees in mid-December. The financial loss was large, probably well over £2500. Succeeding years showed less dramatic losses of buds and these were not necessarily associated with a loss in the value of the crop picked.

Detailed studies of the effects of Bullfinch damage showed it did not always reduce the crop; in some instances there was no effect and it could even be associated with a slight increase. Partly this was because a small proportion of the attacked buds produced some flowers; on heavily damaged trees these formed 60% of flower trusses. More important was that flowers (and buds) surviving on heavily damaged trees set more fruitlets than those on undamaged trees. Following flowering, usually in June when fruitlets were still small, there was typically a large natural drop of excess fruitlets. This was less in years when the number of buds, and consequently the number of fruitlets, was depleted. Thus on undamaged trees, many buds did not produce pears and Bullfinch damage increased the fruit-bearing potential of buds that escaped attack. Another factor was that heavily damaged trees produced larger pears, so a greater percentage of their fruit was of marketable size. Finally, the pear trees studied compensated for the loss of buds in one year by producing more the following year. As a result, their tolerance to attack was greatest in the third year, when a loss of 90% of the buds did not reduce their crop.

The activities of Bullfinches are not the only reason for crop reduction. The fruit is attacked later in the growing season by other birds such as tits, thrushes, Blackbirds and Starlings. Also, pears are made unfit for marketing by the activities of wasps and other insects, and by bad weather during the growing season; autumnal gales especially can cause significant losses. These factors result in an immediate and irretrievable loss of crop, in direct contrast to Bullfinch damage that may have little or no effect, even at high levels.

Bullfinches are a serious problem to tree and bush fruit growers. However, our work indicated that they may not have the exclusively bad influence that is often suggested. They are active in orchards at a time when they are easily seen and blamed for crop losses, because there are no leaves on the trees. On the other hand, the damage they cause is only one of a number of factors that reduce the final harvest.

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T. J. Seller and
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First record of the Sooty Shearwater *Puffinus griseus* for Arabia

by P. R. Colston and M. D. Gallagher

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The mostly intact skeletal remains of a medium sized *Puffinus* shearwater were discovered amongst debris on a tideline of a shelving beach near Azaiba, Batinah, Sultanate of Oman, on the Gulf of Oman, at 23°36'N, 58°20'E, on 23 June 1982 by Wg. Cdr. D. Foster. The specimen was passed to MDG who realised that it was unusual and took it to the British Museum (Natural History) (BMNH) where it is now lodged as a skeleton (BM S/1982-115-1) and where we identified it as a Sooty Shearwater *Puffinus griseus*. Although one wing was missing and the head detached, the rest of the corpse was apparently complete, still retaining the feathers of the tail and parts of the body. The dark blackish-brown wing showed the silvery-white under-wing pattern characteristic of *griseus*, and the long slender black bill matched other specimens in the BM. Measurements were: wing 298 mm; tail, strongly rounded with 12 tail feathers, 90 mm; bill (from skull) 52 mm; tarsus 55 mm; length of middle toe 62 mm. The primaries were abraded and the rest of the plumage also showed some degree of wear, so it was therefore probably a full grown adult.

This migratory, cold-water species breeds in the sub-antarctic around South America, New Zealand and Tasmania, departing between mid-March and May, mostly migrating rapidly northward across the equatorial Pacific and Atlantic Oceans to winter in the northern temperate zones - Bourne (1956) *Sea Swallow* 9:23-25; Phillips (1963) *Ibis* 105: 340-353; Cramp & Simmons (1977) *Birds of the Western Palearctic* 1:143-5. Sooty Shearwaters occur at sea south of Kerguelen I. in the southern Indian Ocean (Bourne 1956) and though there had been no records from further north, Bourne pointed out that there had been 2 records of the Short-tailed Shearwater *P. tenuirostris* accidentally migrating north in the "wrong" (Indian) ocean and that the Sooty Shearwater seemed equally likely to do the same thing (Bourne (1960) *Sea Swallow* 13:20; (1967) *Ibis* 109:152). A sighting of a total of 15 Sooty Shearwaters was subsequently reported from the east coast of Sri Lanka in November 1974 "when the size, colour, mode of flight and silvery wing linings allowed positive identification" (Sinclair 1977) *J. Bombay Nat. Hist. Soc.* 74: 354). However it is surprising that Sinclair does